IN THE CLAIMS

This listing of claims replaces all prior versions and listings of the claims in the present application.

Listing of Claims:

Claims 1-12 (Canceled).

Claim 13 (Currently Amended): A method of regeneration of a motor vehicle particle filter, in which a device configured for regeneration of the filter is used as soon as a load value of the filter exceeds a predetermined threshold, comprising:

calculating a parameter representing operating conditions of the device configured for regeneration; and

controlling operation of the device configured for regeneration in accordance with a value of the parameter wherein the parameter representing the operating conditions of the device configured for regeneration includes a ratio of a flow of exhaust gases emanating from an engine of the vehicle and a measurement of a mass of soot burned during use of the device for regeneration over a predetermined period of time,

wherein said mass of soot is determined from the equation:

$M(i+1) = M(i)-V(i)$, in which:

$M(i)$ designates the mass of soot at instant i, and

$V(i)$ designates the rate of regeneration at instant i.

Claim 14 (Previously Presented): A method of regeneration according to Claim 13, which comprises calculating the parameter continuously while the vehicle is running.

Claim 15 (Previously Presented): A method of regeneration according to Claim 13, which comprises calculating the parameter during use of the device configured for regeneration.

Claim 16 (Canceled).

Claim 17 (Previously Presented): A method of regeneration according to Claim 13, wherein the parameter representing the operating conditions of the device configured for regeneration includes a ratio between instantaneous flow of exhaust gases and a rate of combustion of soot.

Claim 18 (Previously Presented): A method of regeneration according to Claim 13, which comprises controlling operation of the device configured for regeneration by a comparison between the value of the parameter and at least one threshold value stored in memory.

Claim 19 (Currently Amended): A method of regeneration according to Claim [[16]] 13, which comprises extracting the flow of exhaust gases from a map stored in a memory in a central computer managing operation of the engine of the vehicle.

Claim 20 (Previously Presented): A method of regeneration according to Claim 19, which comprises extracting the mass of soot burned from the map stored in the memory in the central computer.

Claim 21 (Currently Amended): A method of regeneration according to Claim [[16]] 13, which comprises determining the mass of soot burned from the mass of soot previously burned and a rate of regeneration of the filter.

Claim 22 (Previously Presented): A method of regeneration according to Claim 21, which comprises extracting the rate of regeneration of the filter from a map stored in a memory in a central computer managing operation of the engine of the vehicle, depending on an internal temperature of the particle filter.

Claim 23 (Previously Presented): A method of regeneration according to Claim 22, wherein the internal temperature $Tfcp$ of the particle filter is calculated from equation:

$Tfcp = \alpha Te + (1-\alpha) \times Ts$,

in which

Te designates inlet temperature of the particle filter;

Ts designates outlet temperature of the particle filter; and

α designates a coefficient worked out as a function of the difference between the inlet temperature Te and the outlet temperature Ts, based on a mapped function in the central computer.

Claim 24 (Currently Amended): A system of control of regeneration of a motor vehicle particle filter, comprising:

a device configured for controlling a load level of the particle filter, and for regeneration of the filter;

a device configured for calculation of a parameter representing operating conditions of the device configured for regeneration so as to control operation of the device configured

for regeneration as a function of a value of the parameter wherein the parameter representing

operating conditions of the device for regeneration comprises a ratio of a flow of exhaust

gases emanating from an engine of the vehicle and a measurement of a mass of soot burned

during use of the device configured for regeneration over a predetermined period of time,

wherein said mass of soot is determined from the equation:

$M(i+1) = M(i)-V(i)$, in which:

$M(i)$ designates the mass of soot at instant i, and

$V(i)$ designates the rate of regeneration at instant i.